



# CONSUMER PRICE INDEX (CPI)

**NOVEMBER 2021** 

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National Institute of Statistics of Rwanda

# 1. Summary

This is the monthly publication of the Consumer Price Index (CPI) for the month of November 2021. Urban CPI will be the focus of this publication as it is the headline index for monetary policy purposes.

## 1.1. Urban Index

Urban CPI increased by 1 percent on annual basis (November 2021 and November 2020) and decreased by 0.5 percent on monthly basis (November 2021 to October 2021). The annual average inflation rate between November 2021 and November 2020 was 1 percent.

### 1.2. Rural Index

Rural CPI decreased by 6.4 percent on annual basis and decreased by 1.1 percent on monthly basis.

### 1.3. Overall Rwanda Index

Rwanda CPI decreased by 3.4 percent on annual basis and decreased by 0.9 percent on monthly basis.

TABLE 1: Consumer Price Index, Urban and Rural													
		percentage change on the same period 12 months earlier:											
	2020		2021										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Urban CPI Annual change	4.2	3.7	2.8	1.6	2.0	2.4	-0.1	-0.2	-0.4	-0.6	-0.9	0.6	1.0
Rural CPI Annual change	4.7	4.1	4.0	4.1	1.5	3.0	0.7	0.3	-1.7	-2.8	-4.8	-6.0	-6.4
Rwanda CPI Annual change	4.5	3.9	3.5	3.9	1.7	2.7	0.4	0.1	-1.1	-1.8	-3.2	-3.3	-3.4
Urban CPI Monthly change	-1.0	-0.8	-0.3	0.4	1.4	0.2	-0.5	-0.2	0.0	0.3	0.6	0.6	-0.5
Rural CPI Monthly change	-0.7	-1.7	-1.2	0.5	1.4	-1.6	-2.5	0.2	-0.4	0.6	-0.1	-0.7	-1.1
Rwanda CPI Monthly change	-0.8	-1.3	-0.8	0.5	1.4	-0.9	-1.6	0.0	-0.3	0.5	0.2	-0.1	-0.9
Source: NISR													

## 2. Urban Consumer Price Index

The urban CPI is calculated based on approximately 1,622 products in twelve urban centres of Rwanda. The table below shows monthly and annual changes in November 2021 for the main categories of the urban index.

TABLE	E 2: Consumer Price Index, Urban summary		Percentage chang	o in Nov. 2021
Code	Categories	Weights	on Oct. 2021	on Nov. 2021
	GENERAL INDEX	100%	-0.5%	1.0%
01	Food and non-alcoholic beverages	27%	-2.7%	-3.7%
01.1.1	Bread and cereals	5%	1.1%	-0.5%
01.1.2	Meat	2%	0.3%	6.5%
01.1.4	Milk cheese and eggs	1%	-1.4%	6.1%
01.1.7	Vegetables	9%	-10.2%	-19.9%
01.2	Non-alcoholic beverages	1%	-0.1%	2.6%
02	Alcoholic beverages tobacco and narcotics	5%	0.2%	4.0%
03	Clothing and footwear	5%	0.3%	3.3%
04	Housing water, electricity, gas and other fuels	21%	0.2%	1.3%
05	Furnishings household equipment and routine household maintenance	4%	1.5%	6.5%
06	Health	1%	0.5%	0.8%
07	Transport	12%	0.2%	3.8%
08	Communication	3%	0.0%	0.0%
09	Recreation and culture	3%	0.7%	2.1%
10	Education	3%	0.0%	19.2%
11	Restaurants and hotels	9%	0.9%	3.9%
12	Miscellaneous goods and services	6%	0.2%	0.2%
Source	e: NISR			

Urban CPI increased by 1 percent in November 2021 compared to the same month of 2020. Transport increased by 3.8 percent, Education increased by 19.2 percent and Restaurants and Hotels increased by 3.9 percent.

The CPI for November 2021 decreased by 0.5 percent compared to October 2021. Food and non-alcoholic beverages decreased by 2.7 percent.

The underlying inflation rate (excluding fresh food and energy) increased by 3.8 percent when compared to November 2020 and increased by 0.4 when compared to October 2021 (See Table 4).

The annual average inflation rate between November 2021 and November 2020 is 1 percent. The annual average underlying inflation rate is 2 percent.

TABLE 3: Consumer Price Index (Urban only): Core and General, annual percentage change (evolution over 12 months)													
percentage change on the same period 12 months earlier:													
	2020		2021										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
General index	8.0	7.7	7.3	6.7	6.2	5.7	4.9	4.1	3.3	2.6	1.8	1.2	1.0
Core / Underlying index	5.6	5.6	5.5	5.4	5.3	5.2	4.5	3.9	3.3	2.7	2.2	2.0	2.0
Source: NISR													

Figure 1: Annual changes in urban CPI (January 2014 – November 2021)

# 3. Other selected urban indices

-2%

This section highlights five selected urban indices: the local goods index, the imported goods index, the fresh products index, the energy index and the core index.

On annual basis, the local goods index decreased by 0.8 percent, the imported goods index increased by 7 percent, the fresh products index decreased by 10.2 percent, the energy index increased by 2.9 percent and the core index or the general index excluding fresh products and energy increased by 3.8 percent.

On monthly basis, the local goods index decreased by 0.8 percent, the imported goods index increased by 0.2 percent, the fresh products index decreased by 5.1 percent, the energy index increased by 0.7 percent and the core index increased by 0.4 percent.

TABLE 4: Consumer Price Index (Urban only), Core & other							
Categories	Weights	on Oct. 2021	on Nov. 2020				
GENERAL INDEX	100%	-0.5%	1.0%				
Local Goods Index	77%	-0.8%	-0.8%				
Food and non-alcoholic beverages	21%	-3.3%	-7.9%				
Housing, water, electricity, gas and other fuels	21%	0.2%	1.2%				
Transport	6%	-0.2%	-0.5%				
Imported Goods Index	23%	0.2%	7.0%				
Food and non-alcoholic beverages	7%	-0.9%	10.7%				
Furnishing, household equipment	2%	1.8%	8.3%				
Transport	6%	0.6%	7.6%				
Fresh Products index <sup>1</sup>	16%	-5.1%	-10.2%				
Energy index	7%	0.7%	2.9%				
General Index excluding fresh Products and energy <sup>2</sup>	77%	0.4%	3.8%				
Source: NISR							
(1) Fresh products are food products which have seasonal fluctuati	ions						
(2) Proxy for underlying inflation							

# 4. Methodological notice

The Consumer Price Index (CPI) is a measure of the average change over time of goods and services purchased by households. The CPI uses a Modified Laspeyres formula to calculate the index. The reference population for the CPI consists of all households, urban and rural in Rwanda.

The household basket includes 1,622 products sold in many places spread all over the country. A variety of places of observation are selected: shops, markets, hospitals, schools etc. More than 29,482 prices in urban areas and 10,744 in rural areas are collected every month.

Weights used for the index are from the Household Living Conditions Survey (EICV4) results conducted in 2013-2014 with a sample of 14,419 households.

Each month, NISR publishes the All Rwanda index, All Urban index and All Rural index. The Urban CPI is considered as the headline index for monetary policy purposes. In addition, select detailed item indices are published for items judged to be important or experiencing extreme price movement.

### 4.1 Main terms used in Rwandan CPI

**General index**: The highest level of aggregation of a CPI which covers all the items within the scope of the CPI

**Core (underlying) inflation**: A type of CPI which shows the underlying trend in inflation by excluding those movements which arise from transient factors such as seasonality or other short term price volatility

**Index reference period (Feb 2014=100):** The period with which all other periods are compared (the period for which the value of the CPI is set at 100).

**Monthly inflation**: Compare the current index number compared with the index number of the previous month

**Annual inflation:** Compare the index number for a particular month with the index number for the same month of the previous year

**Annual average inflation:** Compare the average of all the monthly indices in a particular year with the corresponding average for the previous year. Any twelve-month average (eg. from July 2016 to June 2017) may be compared with the twelve-month average (also from July 2015 to June 2016) in order to calculate June 2017 inflation rate.

# 4. 2. How to Interpret CPI

Movements of the indices from one month to another usually are expressed as percentage changes rather than changes in index points. The level of the index (relative to its base period) affects index point changes, but it does not affect percent changes. The following example illustrates how to calculate percentage changes:

## Index point change

CPI	178
Less CPI for previous period	<u>176</u>
Equals index point change	2
Percent change	
Index point difference	2
Divided by the previous index	176
Equals	0.011
Results multiplied by 100	0.011 x 100
Equals percent change	1.1

# 6. Annexes: Reference Tables

			Index (F	Feb 2014=1	100)	Percentage chan	Contributions <sup>1</sup> :		
Code	Categories	Weights	Nov-20	Oct-21	Nov-21	on Oct. 2021	on Nov. 2020	1 month	12 months
00	GENERAL INDEX	100%	128.3	130.4	129.7	-0.5%	1.0%	-0.5%	1.0%
01	Food and non-alcoholic beverages	27%	144.6	143.0	139.2	-2.7%	-3.7%	-0.8	-1.2
01.1.1	Bread and cereals	5%	131.4	129.2	130.7	1.1%	-0.5%	0.1	0.0
01.1.2	Meat	2%	153.2	162.7	163.2	0.3%	6.5%	0.0	0.2
01.1.4	Milk cheese and eggs	1%	128.1	137.9	136.0	-1.4%	6.1%	0.0	0.1
01.1.7	Vegetables	9%	166.7	148.7	133.5	-10.2%	-19.9%	-1.0	-2.3
01.2	Non-alcoholic beverages	1%	130.4	133.9	133.8	-0.1%	2.6%	0.0	0.0
02	Alcoholic beverages tobacco and narcotics	5%	170.3	176.6	177.1	0.2%	4.0%	0.0	0.3
03	Clothing and footwear	5%	128.4	132.3	132.6	0.3%	3.3%	0.0	0.2
04	Housing water, electricity, gas and other fuels	21%	121.0	122.3	122.6	0.2%	1.3%	0.0	0.2
05	Furnishings household equipment and routine household maintenance	4%	119.5	125.5	127.3	1.5%	6.5%	0.1	0.2
06	Health	1%	107.8	108.1	108.6	0.5%	0.8%	0.0	0.0
07	Transport	12%	127.4	131.9	132.2	0.2%	3.8%	0.0	0.5
08	Communication	3%	105.8	105.8	105.8	0.0%	0.0%	0.0	0.0
09	Recreation and culture	3%	126.5	128.2	129.1	0.7%	2.1%	0.0	0.1
10	Education	3%	109.5	130.6	130.6	0.0%	19.2%	0.0	0.5
11	Restaurants and hotels	9%	107.1	110.4	111.3	0.9%	3.9%	0.1	0.3
12	Miscellaneous goods and services	6%	116.2	116.2	116.4	0.2%	0.2%	0.0	0.0

Source: NISR

(1) "Contributions" take into account both the growth rate and the relative weight of each category to explain the percentage change observed.

Annex 2: Consumer Price Index, Rural Index (Feb 2014=100) Percentage change in Nov. 2021 Contributions<sup>1</sup>: Code Categories Weights Nov-20 Oct-21 Nov-21 on Oct. 2021 on Nov. 2020 1 month 12 months -6.4% 100% 147.0 139.1 137.6 -1.1% -1.1% -6.4% 00 **GENERAL INDEX** 01 Food and non-alcoholic beverages 48% 160.4 140.4 135.2 -3.7% -15.7% -1.8 -8.2 0.0 01.1.1 Bread and cereals 8% 150.4 146.6 149.9 2.2% -0.4% 0.2 01.1.2 Meat 173.3 0.1 2% 162.5 173.2 0.0% 6.6% 0.0 01.1.4 Milk cheese and eggs 1% 133.9 147.4 151.8 3.0% 0.1 13.4% 0.0 175.1 -28.8% -8.9 01.1.7 Vegetables 26% 136.3 124.7 -8.5% -2.2 0.0 01.2 Non-alcoholic beverages 1% 119.9 122.2 122.2 0.0% 1.9% 0.0 02 8% 4.0% 0.3 Alcoholic beverages tobacco and narcotics 148.6 154.1 154.5 0.3% 0.0 03 Clothing and footwear 5% 132.1 138.3 137.9 -0.3% 4.4% 0.0 0.2 04 Housing water, electricity, gas and other fuels 136.4 137.2 141.2 2.9% 0.5 0.5 16% 3.5% Furnishings household equipment and routine 05 3% 123.2 127.8 134.5 5.2% 9.2% 0.2 0.2 household maintenance 06 Health 1% 106.7 109.0 109.0 0.1% 2.1% 0.0 0.0 07 4% 107.7 108.4 108.5 0.1% 0.7% 0.0 0.0 Transport 100.0 0.0 08 Communication 2% 100.0 100.0 0.0% 0.0% 0.0 09 Recreation and culture 1% 124.7 130.3 130.4 0.0% 4.5% 0.0 0.1 186.2 186.2 0.1 10 Education 1% 176.4 0.0% 5.6% 0.0 Restaurants and hotels 5% 127.3 127.6 4.9% 0.2 11 121.7 0.2% 0.0 12 Miscellaneous goods and services 4% 116.9 117.7 117.8 0.1% 0.8% 0.0 0.0

Source: NISR

(1) "Contributions" take into account both the growth rate and the relative weight of each category to explain the percentage change observed.

Annex 3: Consumer Price Index, All Rwanda Index (Feb 2014=100) Percentage change in Nov. 2021 Contributions<sup>1</sup>: Code Weights Nov-20 Nov-21 Categories Oct-21 on Oct. 2021 on Nov. 2020 1 month 12 months 00 **GENERAL INDEX** 100% 139.9 136.3 135.2 -0.9% -3.4% -0.9% -3.4% -5.4 01 Food and non-alcoholic beverages 39% 156.7 142.3 137.5 -3.4% -12.3% -1.4 0.0 01.1.1 Bread and cereals 7% 145.1 141.8 144.5 1.9% -0.4% 0.1 01.1.2 Meat 2% 158.4 168.6 168.8 0.1% 6.6% 0.0 0.1 01.1.4 Milk cheese and eggs 1% 142.1 143.3 0.8% 9.7% 0.0 0.1 130.6 -6.2 01.1.7 Vegetables 18% 173.6 139.2 126.8 -8.9% -27.0% -1.7 0.0 01.2 Non-alcoholic beverages 1% 124.7 127.6 127.6 -0.1% 2.3% 0.0 0.3 02 Alcoholic beverages tobacco and narcotics 7% 154.9 160.7 161.1 0.3% 4.0% 0.0 0.2 03 Clothing and footwear 5% 130.4 135.6 135.5 -0.1% 3.9% 0.0 04 Housing water, electricity, gas and other fuels 18% 127.9 129.0 131.1 1.6% 2.5% 0.3 0.4 05 Furnishings household equipment and routine 3% 121.2 126.5 130.9 3.5% 8.0% 0.1 0.2 household maintenance 1% 107.2 108.6 108.9 0.3% 1.5% 0.0 0.0 06 Health 07 8% 124.5 0.2% 2.9% 0.2 Transport 121.0 124.3 0.0 0.0 08 Communication 2% 102.5 102.5 102.5 0.0% 0.0% 0.0 128.9 129.4 0.1 09 Recreation and culture 2% 125.6 0.4% 3.1% 0.0 0.3 10 Education 2% 139.6 157.1 157.1 0.0% 12.6% 0.0 11 Restaurants and hotels 6% 113.8 118.0 118.7 0.6% 4.3% 0.0 0.2 12 Miscellaneous goods and services 5% 116.1 116.6 0.2% 0.5% 0.0 0.0 116.4

Source: NISR

<sup>(1) &</sup>quot;Contributions" take into account both the growth rate and the relative weight of each category to explain the percentage change observed.

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